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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/556,654 KARLSSON, NILS Office Action Summary Examiner Art Unit SORI A. AGA 2419 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status 1) Responsive to communication(s) filed on 30 June 2009. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-10 and 13-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-10 and 13-20 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/S6/08) Notice of Informal Patent Application Paper No(s)/Mail Date 06/30/2009 6) Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2009 has been entered.

Claim Objections

Claims 13-20 are objected to because of the following informalities:

Claim 13 recites "the computer program" in line 4. The relation of said recitation with the "computer program product" recited in line 1 should be explicitly shown in the claim language. In addition, since the "computer program product" recited in claim 13 is not explicitly defined in the specification, applicant should amend said recitation in order to explicitly show that said 'product' only includes subject matter limited to that which falls within a statutory category of invention (process, machine, manufacture or a composition of matter). Appropriate correction is required.

Response to Amendment

In the applicant's amendment, the recitation 'specific subset' is not defined by the claim, the specification does not provide a clear explanation of the term 'subset'. In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art

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[MPEP 2111.01]. For examination purposes examiner adopts the following definition for the term 'subset': a set 'A' is a subset of set 'B' if set 'A' is "contained" inside 'B'. Notice that A and B may coincide.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 6-10, 13, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burst, Jr. (US 7,088,677).

Regarding claim 1, Burst teaches a method of controlling call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the method comprising the steps of [see column 6 lines 1-16 where systems and methods for detecting congestion and using the congestion information, Edge devices such as media gateways refuse new incoming connections from core network (the core network and media gateways together make up the packet switched backbone) is shown]:

monitoring the level of congestion suffered by incoming packets for a first gateway [see column 16 lines 10-17 where media gateway detects and attempts to determine the point at which the link becomes congested and the congestion of the networks] wherein said incoming packets are transmitted from a group of media gateways over said

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backbone and wherein said first media gateway acting as a terminating media gateway for said group of media gateways [see column 15 lines 57-65 where the packets are sent across a network and to other media gateways (a group of media gateways over said backbone); see also column 16 lines 23-27 where the destination gateway (first media gateway acting as a terminating media gateway) records arrival time of the packets]; and wherein said group of media gateways are a specific subset of said packet switched backbone (note that the collection of gateways and the IP network together makeup the 'switched backbone') and receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said group of media gateways; making a decision on the admissibility of that request [see column 8 lines 1-10 where the media gateway receives a request to create a call to a specific destination and where congestion is computed and is implied and as a result the media gateways at both ends-source and destination-stop admitting new calls];

rejecting or accepting said request for said new bear connection based on said admission decision [see column 18 lines 8-11 where the request for admission is rejected based upon the determined delay].

However, Burst does not, in the same embodiment, explicitly teach the decision is based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said group of media gateways. However, Burst in a different embodiment teaches the delay upon which the decision is made can be based upon Db-"bearer packet delay" where Db is calculated and

in performing CAC (connection admission control).

stored in the congestion state table for later use (previously computed) [see column 17 lines 60-67 (see also column 16 lines 30-32)]. It would have been obvious for a person having ordinary skill in the art to use a previously determined congestion table. This is desirable in order to enable the media gateway processor utilize an organized information

Regarding claim 6, Burst teaches the method according to claim 1, wherein said packet switched backbone is an Internet Protocol (IP) backbone [see column 6 lines 28-31 where the network is shown to be an IP network core].

Regarding claim 7, Burst teaches the method according to claim 1, wherein said step of making said decision on the admissibility of said request is made at said first media gateway [see column 7 lines 4-8 where the destination gateway performs the Connection Admission Control including refusing connection requests to nodes over links that the gateway has determined are congested].

Regarding claim 8, Burst teaches the method according to claim 1, wherein said step of making the decision on the admissibility of said request is made at the a media gateway controller controlling said first media gateway and said monitored congestion levels are signaled to the media gateway controller by the first media gateway [see column 12 lines 1-5 where the media gateway processor (media gateway controller) utilizes

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information stored in a congestion state table (first media gateway) in performing said Call Admission Control].

Regarding claim 9, Burst teaches a media gateway arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone, the media gateway comprising [see column 6 lines 1-16 where systems and methods for detecting congestion and using the congestion information, Edge devices such as media gateways refuse new incoming connections from core network (core network and media gateways together make up the packet switched backbone) is shown]:

means for monitoring the level of congestion suffered by incoming packets [see column 16 lines 10-17 where media gateway detects and attempts to determine the point at which the link becomes congested and the congestion of the networks] to that gateway from other media gateways over said backbone wherein said gateway acting as a terminating media gateway for said other media gateways [see column 15 lines 57-65 where the packets are sent across a network and to other media gateways (a group of media gateways over said backbone); see also column 16 lines 23-27 where the destination gateway (first media gateway acting as a terminating media gateway) records arrival time of the packets]; and wherein said group of media gateways are a specific subset of said packet switched backbone (note that the collection of gateways and the IP network together makeup the 'switched backbone');

means for receiving or accepting a request for that media gateway to terminate a new bearer connection extending over said backbone from a requesting media gateway within said other media gateways; means coupled to the monitoring means and the receiving means for making a decision on the admissibility of that request [see column 8 lines 1-10 where the media gateway receives a request to create a call to a specific destination and where congestion is computed and is implied and as a result the media gateways at both ends-source and destination-stop admitting new calls]; means for rejecting said request for said new bearer connection based on said admission decision [see column 18 lines 8-11 where the request for admission is rejected based upon the determined delay].

However, Burst does not explicitly, in the same embodiment, teaches the decision is based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said group of media gateways. However, Burst in a different embodiment teaches the delay upon which the decision is made can be based upon Db-"bearer packet delay" where Db is calculated and stored in the congestion state table for later use (previously computed) [see column 17 lines 60-67 (see also column 16 lines 30-32)]. It would have been obvious for a person having ordinary skill in the art to use a previously determined congestion table. This is desirable in order to enable the media gateway processor utilize an organized information in performing CAC (connection admission control).

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Regarding claim 10, Burst teaches a media gateway controller arranged to control call admission within a system including a plurality of media gateways interconnected by a packet switched backbone [see fig. 4A '402' where a media gateway processor (media controller) is shown within a system; and see column 6 lines 1-16 where systems and methods for detecting congestion and using the congestion information, Edge devices such as media gateways refuse new incoming connections from core network (the core network and media gateways together make up the packet switched backbone) is shown], the media gateway controller comprising: an interface towards a first media gateway and means for receiving monitored congestion levels from said first media gateway [see column 12 lines 1-5 where the media gateway processor (media gateway controller) utilizes (interfaces and receives) information stored in a congestion state table (first media gateway) in performing said Call Admission Control];

the monitored congestion levels being indicative of the congestion suffered by incoming packets to said first media gateway from other media gateways over said backbone wherein said first media gateway acting as a terminating media gateway for said other media gateways [see column 16 lines 10-17 where media gateway detects and attempts to determine the point at which the link becomes congested and the congestion of the networks; and see column 15 lines 57-65 where the packets are sent across a network and to other media gateways (a group of media gateways over said backbone); see also column 16 lines 23-27 where the destination gateway (first media gateway acting as a terminating media gateway) records arrival time of the

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packets and computes delay]; and wherein said group of media gateways are a specific subset of said packet switched backbone (note that the collection of gateways and the IP network together makeup the 'switched backbone');

means for receiving a call request requiring that said first media gateway terminate a new bearer connection extending over said backbone from a second media gateway within said other media gateways; means for making a decision on the admissibility of that request based upon the congestion level suffered by said incoming packets for said first media gateway from said second media gateway or from said other media gateways; [see column 8 lines 1-10 where the media gateway receives a request to create a call to a specific destination (receiving call request requiring that said first media terminate a new bearer connection) and where

and means for rejecting or accepting said request for said new bearer connection based on said decision [see column 18 lines 5-140 where congestion is computed and is implied and as a result the media gateways at both ends-source and destination-stop admitting new calls].

Regarding claim 13, Burst teaches a computer program product within a computer usable medium [see column 18 lines 16-20 where a computer readable medium having computer readable instructions for performing congestion detection and program for performing connection admission control is shown] for controlling call admission within a system including a plurality of media gateways interconnected by a packet switched backbone [see column 6 lines 1-16 where systems and methods for detecting

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congestion and using the congestion information, Edge devices such as media gateways refuse new incoming connections from core network (the core network and media gateways together make up the packet switched backbone) is shown], the computer program comprising instructions within the computer usable medium for: monitoring the level of congestion suffered by incoming packets for a first gateway [see column 16 lines 10-17 where media gateway detects and attempts to determine the point at which the link becomes congested and the congestion of the networks] wherein said incoming packets are transmitted from a group of media gateways over said backbone and wherein said first media gateway acting as a terminating media gateway for said group of media gateways [see column 15 lines 57-65 where the packets are sent across a network and to other media gateways (a group of media gateways over said backbone); see also column 16 lines 23-27 where the destination gateway (first media gateway acting as a terminating media gateway) records arrival time of the packets]; and wherein said group of media gateways are a specific subset of said packet switched backbone (note that the collection of gateways and the IP network together makeup the 'switched backbone'); and receiving a request for said first media gateway to terminate a new bearer connection extending over said backbone from a second media gateway within said group of media

extending over said backbone from a second media gateway within said group of media gateways; making a decision on the admissibility of that request [see column 8 lines 1-10 where the media gateway receives a request to create a call to a specific destination and where congestion is computed and is implied and as a result the media gateways at both ends-source and destination-stop admitting new calls];

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However, Burst does not explicitly, in the same embodiment, teaches the decision is based upon the previously monitored level of congestion suffered by said first media gateway for said incoming packets from said second media gateway or from said group of media gateways. However, Burst in a different embodiment teaches the delay upon which the decision is made can be based upon Db-"bearer packet delay" where Db is calculated and stored in the congestion state table for later use (previously computed) [see column 17 lines 60-67 (see also column 16 lines 30-32)]. It would have been obvious for a person having ordinary skill in the art to use a previously determined congestion table. This is desirable in order to enable the media gateway processor utilize an organized information in performing CAC (connection admission control).

Regarding claim 18, Burst teaches the computer program product according to claim 13, wherein said packet switched backbone is an Internet Protocol (IP) backbone [see column 6 lines 28-31 where the network is shown to be an IP network core].

Regarding claim 19, the computer program product according to claim 13, wherein said instructions for making said decision on the admissibility of said request for said first media gateway to terminate said new bearer connection is made at the first media gateway [see column 7 lines 4-8 where the destination gateway performs the Connection Admission Control including refusing connection requests to nodes over links that the gateway has determined are congested].

Regarding claim 20, Burst teaches the computer program product according to claim 13, wherein said instructions for making the decision on the admissibility of said request for said first media gateway to terminate said new bearer connection is made at a media gateway controller controlling said first media gateway, and said monitored congestion levels are signaled to the media gateway controller by the first media gateway [see column 12 lines 1-5 where the media gateway processor (media gateway controller) utilizes information stored in a congestion state table (first media gateway) in performing said Call Admission Control].

5. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burst as applied to claims 1,6-10,13, and 18-20 above, and further in view of Rao (US 6,876,627 B1) (herein after Rao).

Regarding claim 2, Burst teaches the method according to claim Lincluding the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above. However, Burst does not explicitly teach the step of: examining said incoming packets received at said first media gateway to determine whether or not they contain a congestion notification flag. However, Rao, in the same field of endeavor (VOIP) teaches monitoring congestion in a network in a Connection Admission Control by monitoring congestion notifications sent in a form of a bit within a header in a packet [see column 4 lines 21-33]. Therefore, it would have been obvious for a person having ordinary skill in the art to monitor the level of congestion suffered by

incoming packets to a one of a plurality of media gateways comprising examining packets received at that gateway to determine whether or not they contain a congestion notification flag. This is desirable because it allows the controller make prompt decisions on call admission and switching calls to alternate links based on real time QOS updates including congestion which allows the carrier guarantee VOIP quality of service to its subscribers.

Regarding claim 14, Burst teaches the computer program product according to claim 13, including the instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above. However, Burst does note explicitly teach examining said incoming packets received at that first media gateway to determine whether or not they contain a congestion notification flag. However, Rao, in the same field of endeavor (VOIP), teaches monitoring congestion in a network in a Connection Admission Control by monitoring congestion notifications sent in a form of a bit within a header in a packet [see column 4 lines 21-33]. Therefore, it would have been obvious for a person having ordinary skill in the art to monitor the level of congestion suffered by incoming packets to a one of a plurality of media gateways comprising examining packets received at that gateway to determine whether or not they contain a congestion notification flag. This is desirable because it allows the controller make prompt decisions on call admission and switching calls to alternate links based on real time QOS updates including congestion which allows the carrier guarantee VOIP quality of service to its subscribers.

Claims 3, 5, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Burst as applied to claims 1,6-10,13, and 18-20 above, and further in view of Murphy et al. (US 6.542.499) (herein after Murphy).

Regarding claim 3, Burst teaches the method according to claim 1, including the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway. However, Burst does not explicitly teach the step of: monitoring the rate at which incoming packets are dropped. However, Murphy in the same field of endeavor (VOIP) teaches monitoring the rate at which packets are dropped [column 8 lines 37-39 where congestion is detected by monitoring packet loss]. It would have been obvious for a person having ordinary skill in the art to monitor the rate at which packets are dropped in order to determine the need and perform fall back call link for communications that need call fall back.

Regarding claim 5, Burst teaches the method according to claim 1 including the step of monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above regarding claim 1. However, Burst does not explicitly teach the step of: associating incoming packets or packet sequences with an originating gateway based upon source addresses or parts of source addresses. However, Murphy teaches a controller looks for IP address identified with congestion and If congestion is

detected, a link is established and the call is migrated [see [see column 10 line 66-colum 11line 3].

It would have been obvious for a person having ordinary skill in the art to associate incoming packets with an originating gateway based on source address. This is desirable because it allows the gateway to determine the need and perform fall back call link for communications that need call fall back.

Regarding claim 15, Burst teaches the computer program product according to claim 13, including instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above. However, Burst does not explicitly teach instructions for monitoring the rate at which packets are dropped.

However, Murphy in the same field of endeavor (VOIP) teaches monitoring the rate at which packets are dropped [column 8 lines 37-39 where congestion is detected by monitoring packet loss]. It would have been obvious for a person having ordinary skill in the art to monitor the rate at which packets are dropped in order to determine the need and perform fall back call link for communications that need call fall back.

Regarding claim 17, Burst teaches the computer program product according to claim 13, including instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above. However, Burst does not explicitly teach instructions for associating incoming packets or packet sequences with an originating gateway based upon source addresses or parts of source addresses. However,

Murphy teaches a controller looks for IP address identified with congestion and If congestion is detected, a link is established and the call is migrated [see [see column 10 line 66-colum 11line 3].

It would have been obvious for a person having ordinary skill in the art to associate incoming packets with an originating gateway based on source address. This is desirable because it allows the gateway to determine the need and perform fall back call link for communications that need call fall back.

7. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burst as applied to claims 1,6-10,13, and 18-20 above, and further in view of Rao as applied to claims 2 and 14 and Murphy as applied to claims 3, 5, 15 and 17 above.

Regarding claim 4, Burst teaches the method according to claim as discussed above. However, Burst does not explicitly teach the steps of: monitoring the rate at which incoming packets are dropped by the backbone. However, Murphy in the same field of endeavor (VOIP) teaches monitoring the rate at which packets are dropped [column 8 lines 37-39 where congestion is detected by monitoring packet loss]. It would have been obvious for a person having ordinary skill in the art to monitor the rate at which packets are dropped in order to determine the need and perform fall back call link for communications that need call fall back.

However, Burst does not explicitly teach examining said incoming packets received at said first media gateway to determine whether or not said incoming packets contain a congestion notification flag. However, Rao, in the same field of endeavor (VOIP) teaches monitoring congestion in a network in a Connection Admission Control by monitoring congestion notifications sent in a form of a bit within a header in a packet [see column 4 lines 21-33]. Therefore, it would have been obvious for a person having ordinary skill in the art to monitor the level of congestion suffered by incoming packets to a one of a plurality of media gateways comprising examining packets received at that gateway to determine whether or not they contain a congestion notification flag. This is desirable because it allows the controller make prompt decisions on call admission and switching calls to alternate links based on real time QOS updates including congestion which allows the carrier guarantee VOIP quality of service to its subscribers.

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Regarding claim 16, Burst teaches the computer program product according to claim 13, including instructions for monitoring the level of congestion suffered by said incoming packets for said first media gateway as discussed above. However Burst does not explicitly teach instructions for monitoring the rate at which packets are dropped by the backbone. However, Murphy in the same field of endeavor (VOIP) teaches monitoring the rate at which packets are dropped [column 8 lines 37-39 where congestion is detected by monitoring packet loss]. It would have been obvious for a person having ordinary skill in the art to monitor the rate at which packets are dropped in order to determine the need and perform fall back call link for communications that need call fall back

However, Burst does not explicitly teach examining said incoming packets received at the first media gateway to determine whether or not said incoming packets contain a congestion notification flag. However, Rao, in the same field of endeavor (VOIP) teaches monitoring congestion in a network in a Connection Admission Control by monitoring congestion notifications sent in a form of a bit within a header in a packet [see column 4 lines 21-33]. Therefore, it would have been obvious for a person having ordinary skill in the art to monitor the level of congestion suffered by incoming packets to a one of a plurality of media gateways comprising examining packets received at that gateway to determine whether or not they contain a congestion notification flag. This is desirable because it allows the controller make prompt decisions on call admission and switching calls to alternate links based on real time QOS updates including congestion which allows the carrier guarantee VOIP quality of service to its subscribers.

Response to Arguments

8. Applicant's arguments filed 06/30/2009 have been fully considered but they are not persuasive. The recitation 'wherein said media gateways are a specific subset of said packet switched backbone' does not overcome the Burst reference since the term 'subset' does not necessitate the exclusion of at least one other media gateway from the one/group of media gateways monitored for congestion as alleged by the applicant (see applicant's remarks page 8 third paragraph) (see also the accepted definition of the term 'subset' discussed above).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murphy et al. (US 6,282,192 B1) teaches monitoring one network (a group of media gateways) for congestion and switching the conversation to another network (group of media gateways) (see fig. 1 and column 8 line 4 – column line 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SORI A. AGA whose telephone number is (571)270-1868. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571)272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2419 /Ayaz R. Sheikh/

Supervisory Patent Examiner, Art Unit 2419